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| 09/533,025 | 03/22/2000 | Yao Wang | E0295/7108 | 8409 |

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| EXAMINER |
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| BONURA, TIMOTHY M |

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| 2184 | |

DATE MAILED: 05/08/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 07-01)

*– The MAILING DATE of this communication appears on the cover sheet with the correspondence address –*

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

1) ☒ Responsive to communication(s) filed on <u>21 February 2003</u>.

2a) ☐ This action is **FINAL.**      2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

4) ☒ Claim(s) <u>1-51</u> is/are pending in the application.

　　4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) <u>1-7,10-13,18-20,23,25-27,29-37,41,42,44-46,48 and 50</u> is/are rejected.

7) ☒ Claim(s) <u>8,9,14-17,21,22,24,28,38-40,43,47,49 and 51</u> is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

## Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☒ The drawing(s) filed on <u>24 May 2000</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

　　Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) ☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

　　If approved, corrected drawings are required in reply to this Office action.

12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

　　a)☐ All  b)☐ Some * c)☐ None of:

　　　1.☐ Certified copies of the priority documents have been received.

　　　2.☐ Certified copies of the priority documents have been received in Application No. _____.

　　　3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

　　* See the attached detailed Office action for a list of the certified copies not received.

14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

　　a) ☐ The translation of the foreign language provisional application has been received.

15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.

4) ☐ Interview Summary (PTO-413) Paper No(s). _____.

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: .

## DETAILED ACTION

- Tavallaei, U.S. Patent Number 5,834,856 and Bell, et al, U.S. Patent Number 5,917,997 reject claims 1-3, 11, 25-27, 29, 30, 44-46, 48, and 50.

- Claims 4, 5, 7, 12, 18-20, 23, 27, 31-37, 41, 42 are rejected by Tavallaei and Bell in further view of Vert, U.S. Patent Number 6,360,331

- The follow claims are objected to: 8, 9, 14-17, 21, 38-40, 43, 47, 49, and 51

- Claim 6 and 13 are rejected by USC 112 1$^{st}$ paragraph

### *Claim Rejections - 35 USC § 103*

1.  The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2.  Claims 1-3, 11, 25-27, 29, 30, 44-46, 48, and 50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tavallaei, et al, U.S. Patent Number 5,834,856 and further in view of Bell, et al, U.S. Patent Number 5,917,997. Regarding claim 1:

    a.  Regarding the limitation of hosting an electronic commerce site, Tavallaei discloses computer environments for "banking transactions, document production, manufacturing... and information systems" which are equivalent to an electronic commerce system. (Lines 23-32 of Column 4).

b.  Regarding the limitation as to method a detecting a change in operation of a computer

system, Tavallaei discloses a system that is can detect a failure in a computer system

and fail over to a redundant system.  (Lines 35-41 of Column 4).

c.  Regarding the limitation of automatically configuring a second host computer to host

at least a portion of a site, Tavallaei teaches of test a second host to make sure it can

be used in case of a failure of a primary host. (Lines 65-67 of Column 4 and Lines 1-3

of Column 5).  However, Tavallaei does not teach of a system that can configure a

second host upon the failure of a primary.  Bell teaches of a system that will

configure a secondary server upon the failure of a primary host.  (Lines 60-67 of

Column 1).  It would have been obvious to one of ordinary skill in the art at the time

of the invention to combine the system of Bell with the system of Tavallaei because;

Tavallaei does not disclose means to have data protection in a business data system.

However Tavallaei describes that "the results (of a computer system failure) can be

temporarily catastrophic for the business. " (Lines 30-32 of Column 4).  Bell also

discloses similar concerns.  (Lines 25-29 of Column 1).  By incorporating the data

reliability and reconfiguration means of Bell and the hosting and detecting means of

Tavallaei, a more reliable business host system can be achieved.

3.  Regarding claim 2, detecting at least one failure or malfunction of the electronic

commerce site, Tavallaei discloses a system which can detect an operational failure and

fall over to a back up sever. (Lines 50-62 of Column 3).

4.      Regarding claim 3, Tavallaei discloses an act of automatically shutting down the first

host computer in response to the act of detecting a failure or malfunction. (Lines 1-4 of

Column 5).

5.      Regarding claim 11, Tavallaei discloses an act of detecting a decrease in performance of

the electronic commerce site. (Lines 50-61 of Column 3).

6.      Regarding claim 25, and dealing with the limitation of hosting an electronic commerce

site, Tavallaei discloses computer environments for "banking transactions, document

production, manufacturing... and information systems" which are equivalent to an

electronic commerce system. (Lines 23-32 of Column 4). Concerning the limitation as to

method a detecting a change in operation of a computer system, Tavallaei discloses a

system that is can detect a failure in a computer system and fail over to a redundant

system. (Lines 35-41 of Column 4). Concerning the limitation of automatically

configuring a second host computer to host at least some portion of the information that

was held by the primary sever, Tavallaei discloses a system which shall be given time to

become operational if a primary sever fails, which includes a period of time for the

backup to become operational. (Lines 35-50 and 65-68 of Column 4 and Lines 1-3 of

Column 5). Tavallaei discloses that any number of computer systems can be used to

redundant devices or subsystems. (Lines 50-52 of Column 3).

7.      Regarding claim 26, and dealing with the limitation of hosting an electronic commerce

site, Tavallaei discloses computer environments for "banking transactions, document

production, manufacturing... and information systems" which are equivalent to an

electronic commerce system. (Lines 23-32 of Column 4). Concerning the limitation as to

method a detecting a change in operation of a computer system, Tavallaei discloses a

system that is can detect a failure in a computer system and fail over to a redundant

system. (Lines 35-41 of Column 4). Concerning the limitation of automatically

configuring a second host computer to host at least some portion of the information that

was held by the primary sever, Tavallaei discloses a system which shall be given time to

become operational if a primary sever fails, which includes a period of time for the

backup to become operational. (Lines 35-50 and 65-68 of Column 4 and Lines 1-3 of

Column 5). Tavallaei discloses that any number of computer systems can be used to

redundant devices or subsystems. (Lines 50-52 of Column 3).

8.    Regarding claim 27:

a.   Regarding the limitation of hosting an electronic commerce site, Tavallaei discloses

computer environments for "banking transactions, document production,

manufacturing... and information systems" which are equivalent to an electronic

commerce system. (Lines 23-32 of Column 4).

b.   Regarding the limitation as to method a detecting a change in operation of a computer

system, Tavallaei discloses a system that is can detect a failure in a computer system

and fail over to a redundant system. (Lines 35-41 of Column 4).

c.   Regarding the limitation of automatically configuring a second host computer to host

at least a portion of a site, Tavallaei teaches of test a second host to make sure it can

be used in case of a failure of a primary host. (Lines 65-67 of Column 4 and Lines 1-3

of Column 5). However, Tavallaei does not teach of a system that can configure a

second host upon the failure of a primary. Bell teaches of a system that will

configure a secondary server upon the failure of a primary host. (Lines 60-67 of

Column 1). It would have been obvious to one of ordinary skill in the art at the time

of the invention to combine the system of Bell with the system of Tavallaei because;

Tavallaei does not disclose means to have data protection in a business data system.

However Tavallaei describes that "the results (of a computer system failure) can be

temporarily catastrophic for the business. " (Lines 30-32 of Column 4). Bell also

discloses similar concerns. (Lines 25-29 of Column 1). By incorporating the data

reliability and reconfiguration means of Bell and the hosting and detecting means of

Tavallaei, a more reliable business host system can be achieved.

9.      Regarding claim 29, Tavallaei discloses a relay that is couple to a power source that can

switch between the providing the first host computers with power and not providing

power (Lines 34-50 of Column 6).

10.     Regarding claim 30, Tavallaei discloses a relay that is couple to a power source that can

switch between the not providing the second host computers with power and providing

power. (Lines 34-50 of Column 6).

11.     Regarding claim 44, computer system that includes means of detecting a failure,

malfunction or change in performance, Tavallaei discloses a system that detects failure in

a computer system. (Lines 50-61 of Column 3)

12.     Regarding claim 45:

a.   Regarding the limitation of hosting an electronic commerce site, Tavallaei discloses

computer environments for "banking transactions, document production,

manufacturing... and information systems" which are equivalent to an electronic commerce system. (Lines 23-32 of Column 4).

b. Regarding the limitation as to method a detecting a change in operation of a computer system, Tavallaei discloses a system that is can detect a failure in a computer system and fail over to a redundant system. (Lines 35-41 of Column 4).

c. Regarding the limitation of automatically configuring a second host computer to host at least a portion of a site, Tavallaei teaches of test a second host to make sure it can be used in case of a failure of a primary host. (Lines 65-67 of Column 4 and Lines 1-3 of Column 5). However, Tavallaei does not teach of a system that can configure a second host upon the failure of a primary. Bell teaches of a system that will configure a secondary server upon the failure of a primary host. (Lines 60-67 of Column 1). It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the system of Bell with the system of Tavallaei because; Tavallaei does not disclose means to have data protection in a business data system. However Tavallaei describes that "the results (of a computer system failure) can be temporarily catastrophic for the business. " (Lines 30-32 of Column 4). Bell also discloses similar concerns. (Lines 25-29 of Column 1). By incorporating the data reliability and reconfiguration means of Bell and the hosting and detecting means of Tavallaei, a more reliable business host system can be achieved.

13.    Regarding claim 46, Tavallaei discloses means for detecting at least one failure, malfunction, or change in performance of an electronic commerce site. (Lines 35-41 of Column 4).

14.    Regarding claim 48, Tavallaei discloses a second storage device coupled to a second

computer and controller, wherein the controller has means for replicating a portion of a

site to the second computer. (Lines 55-67 of Column 4 and Lines 1-4 of Column 5).

15.    Regarding claim 50, Tavallaei discloses a networked storage system, wherein the first

storage device is located in the first computer and the second storage device is located in

the second computer. (Lines 5-10 of Column 3).

16.    Claims 4, 5, 7, and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Tavallaei and Bell, as applied to claim1-3 above, and further in view of Vert, et al, U.S.

Patent Number 6,360,331. Regarding claim 4, Tavallaei discloses a method of which an

electronic commerce host has the ability to detect an error, failure, or malfunction on the

first host site and upon detecting this problem to configure a second host site and shut

down the first host site. Tavallaei does not teach the method of the first host stores data

wherein the act of configuring the second host comprises acts of replication the data of

the first host from the storage device to the second host computer. Vert discloses a

method of the first host stores data wherein the act of configuring the second host

comprises acts of replication the data of the first host from the storage device to the

second host computer. (Lines 15-25 and 28-39 of Column 2). It would have been

obvious to one of ordinary skill in the art at the time of the invention to modify the art as

described by Tavallaei to include the method disclosed by Vert. It would have been

within the teaching of Tavallaei to include the method as described by Vert for having a

host computer store data and have an automatic configuration to replicate data from the

first host computer to the second. Adding this feature to Tavallaei would increase the

reliability of the host system in dealing with detecting failure in the host computer. (Lines 21-25 of Column 2 of Vert).

17.    Regarding claim 5, Tavallaei does not disclose a second computer using the replicate to bring the computer online. Vert does disclose a second computer using replicate to bring the computer online. (Lines 39-41 of Column 2).

18.    Regarding claim 7, Tavallaei does not disclose an act of replicating data from a first storage device in the first system to a second storage device in the second system. Vert doest disclose a first storage device in a first system replicating data to a second storage device in a second system. (Lines 29-39 of Column 2).

19.    Regarding claim 10, Tavallaei does not disclose an act of transforming at least a portion of the replicated data of the first host computer for the second host computer when the second host computer is not identical to the first. (Lines 65-68 of Column 1, and Lines 1-13 of Column 2).

20.    Claims 12, 18-20, and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tavallaei and Bell, as applied to claim1 and 11 above, and further in view of Vert, et al, U.S. Patent Number 6,360,331. Regarding claim 12, Tavallaei discloses a method of which an electronic commerce host has the ability to detect an error, failure, or malfunction on the first host site and upon detecting this problem to configure a second host site and shut down the first host site. Tavallaei does not teach the method of the first host stores data wherein the act of configuring the second host comprises acts of replication the data of the first host from the storage device to the second host computer. Vert discloses a method of the first host stores data wherein the act of configuring the

second host comprises acts of replication the data of the first host from the storage device

to the second host computer. (Lines 15-25 and 28-39 of Column 2). It would have been

obvious to one of ordinary skill in the art at the time of the invention to modify the art as

described by Tavallaei to include the method disclosed by Vert. It would have been

within the teaching of Tavallaei to include the method as described by Vert for having a

host computer store data and have an automatic configuration to replicate data from the

first host computer to the second. Adding this feature to Tavallaei would increase the

reliability of the host system in dealing with detecting failure in the host computer. (Lines

21-25 of Column 2 of Vert).

21.     Regarding claim 18, Tavallaei does not disclose a second computer using the replicate to

bring the computer online. Vert does disclose a second computer using replicate to bring

the computer online. (Lines 39-41 of Column 2).

22.     Regarding claim 19, Bell discloses a system with means to modify an IP address so that

traffic directed toward the primary host server will be transferred to the secondary.

(Lines 47-62 of Column 2).

23.     Regarding claim 20, Tavallaei does not disclose an act of replicating data from a first

storage device in the first system to a second storage device in the second system. Vert

doest disclose a first storage device in a first system replicating data to a second storage

device in a second system. (Lines 29-39 of Column 2).

24.     Regarding claim 23, Tavallaei does not disclose an act of transforming at least a portion

of the replicated data of the first host computer for the second host computer when the

second host computer is not identical to the first. (Lines 65-68 of Column 1, and Lines 1-13 of Column 2).

25. Claims 28, 31-37, 41, and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tavallaei and Bell, as applied to claim 27 above, and further in view of Vert. Regarding claim 28, Tavallaei teaches a computer system with a first computer host severing an electronic commerce site, a second computer, and a controller for handling failure and malfunctions in the first computer. Tavallaei does not teach that a controller automatically configures the second host computer in response to a detection of failure, malfunctions, or a change in performance. Vert discloses a controller that can automatically configure a second host computer upon receiving a detect signal. (Lines 65-68 of Column 1 and Lines 1-13 of Column 2). It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the controller as taught by Vert into the computer system as disclosed by Tavallaei. It would have been within the teaching of Tavallaei to incorporate the controller as disclosed by Vert because it would allow for a redundant system with a variety of components. (Lines 61-62 of Column 3).

26. Regarding claim 31, Tavallaei does not disclose a computer system that mirrors over a computer systems storage system to a second computer system. Vert discloses the mirroring of a storage system of one computer system to another. (Lines 15-25 of Column 20).

27. Regarding claim 32, Tavallaei does not disclose a computer system that a first storage system is within a first computer system and a second file system is within a second

computer system. Vert discloses the separate file system contained within separate

computer systems. (Lines 29-41 of Column 2).

28.     Regarding claim 33, Bell discloses of a system wherein the second host has a different

network address than the primary host. (Lines 39-44 of Column 2).

29.     Regarding claim 34, Bell discloses of a system wherein the primary host computer has its

network address changed upon detection of a failure. (Lines 46-53 of Column 2).

30.     Regarding claim 35, Bell discloses a system wherein the router redirects all traffic from

the primary host to the secondary host. (Lines 46-53 of Column 3).

31.     Regarding claim 36, Tavallaei does not disclose a computer system that mirrors over a

computer systems storage system to a second computer system. Vert discloses the

mirroring of a storage system of one computer system to another. (Lines 15-25 of

Column 20).

32.     Regarding claim 37, Tavallaei does not disclose a computer system that a first storage

system is within a first computer system and a second file system is within a second

computer system. Vert discloses the separate file system contained within separate

computer systems. (Lines 29-41 of Column 2).

33.     Regarding claim 41, Tavallaei does not teach a computer system that has a transformation

engine that transforms at least a portion of the replicated data for used by the second host

computer. Vert discloses a transformation engine (Lines 65-68 of Column 1 and 1-13 of

Column 2) as a means of configuring information to work between two computer systems

that have different files systems.

34.     Regarding claim 42, Tavallaei does not disclose a computer system that a first storage

system is within a first computer system and a second file system is within a second

computer system.  Vert discloses the separate file system contained within separate

computer systems.  (Lines 29-41 of Column 2).

## Claim Rejections - 35 USC § 112

35.     The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making
> and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it
> pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode
> contemplated by the inventor of carrying out his invention.

36.     Claims 6 and 13 are rejected under 35 U.S.C. 112, first paragraph, as containing subject

matter which was not described in the specification in such a way as to enable one skilled

in the art to which it pertains, or with which it is most nearly connected, to make and/or

use the invention.  The claims both described an act of "replicating" in which no copying

is performed.  The examiner understands the meaning of the term replicate to copy

something, as an exact copy, to another location.  Thereby the examiner cannot conclude

how a replicating function could be performed without the act of copying.

## Allowable Subject Matter

37.     Claims 8, 9, 14-17, 21, 38-40, 43, 47, 49, and 51 are objected to as being dependent upon

a rejected base claim, but would be allowable if rewritten in independent form including

all of the limitations of the base claim and any intervening claims.

38.     The following are examiner's statement of reason for allowance:

39.     Referring to claims 8-9, the primary reason for allowance is the inclusion of modifying a

        network address of the second host computer.

40.     Referring to claims 14-16, the primary reason for allowance is the inclusion of modifying

        the portion of the replicating data that corresponds to configurable parameters of the first

        host computer.

41.     Referring to claim 17, the primary reason for allowance is the inclusion of performing the

        replicating without modification to the data used for the electronic commerce site.

42.     Referring to claim 21, the primary reason for allowance is the inclusion of modifying the

        network address of the second host computer to be different than a network address of the

        first host computer.

43.     Referring to claim 38, the primary reason for allowance is the inclusion of the first host

        computer is coupled to a first network having a first subnet address and the second host

        computer is coupled to a second network having a second subnet address that is different

        than the first subnet address.

44.     Referring to claim 43, the primary reason for allowance is the inclusion of a storage

        processor being operatively coupled to a storage system.

45.     Referring to claim 47, the primary reason for allowance is the inclusion of storage

        processor.

46.     Referring to claim 49, the primary reason for allowance is the inclusion of having a

        portion not being copied from the first storage device to the second storage device.

47.     Referring to claim 51, the primary reason for allowance is the inclusion of copying

        corrupted or unavailable data from the first storage device.

### *Response to Arguments*

48.     Applicant's arguments, see Paper Number 6, filed 2/21/03, with respect to the previous

action claims 1, 27, and 45, have been fully considered and are persuasive. The rejects of

claims 1, 27 and 25 has been withdrawn. The examiner presents new rejects to those

claims, as presented above.

49.     Applicant's arguments, see Paper Number 6, filed 2/21/03, with respect to the previous

action with respect to claims 6 and 13, have been fully considered and are not persuasive.

The argument by the applicant, "by modifying the assignment of storage devices used by

the primary host computer so that those storage devices are then accessible le to the

secondary host computer" is common use of the term replication. The applicant claims

that replication is not copying. The Microsoft Computer Dictionary defines replication

as: "the process of copying the (data) to the other parts of the network." Webster's

Dictionary defines replication as "a copy, reproduction." Each of these examples clear

state that replication means to copy. The examiner believes that the applicant is

attempting to say that replication means reassigning. The reject is hereby maintained

because the applicant cannot replicate something without copying it.

### *Conclusion*

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to **Tim Bonura**. The examiner can normally be reached on **Mon-**

**Fri: 7:30-5:00, every other Friday off**. The examiner can be reached at: **703-305-7762**.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, **Rob Beausoliel** can be reached on **703-305-9713**. The fax phone numbers for the

organization where this application or proceeding is assigned are:

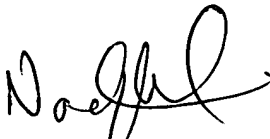**703-746-7239 for regular communications**

**703-746-7240 for After Final communications**

Any inquiry of a general nature or relating to the status of this application or proceeding

should be directed to the **receptionist** whose telephone number is: **703-305-3900**.

Responses should be mailed to:

**Commissioner of Patents and Trademarks**

**Washington, DC 20231**

NADEEM IQBAL
PRIMARY EXAMINER

Tim Bonura
Examiner
Art Unit 2184

tmb
April 26, 2003